

Insert this report after Specification Section 02072

APPENDIX A:
Analytical Results



Southeast
ACCUTEST.
Laboratories

09/27/02

Technical Report for

IMS Environmental

Langley Air Force Base-USACE-Pavement Area

351.3319

Accutest Job Number: F14574

Report to:

IMS Environmental

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ATTN: Walter Bell

Total number of pages in report: 24



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

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Laboratory Director

Certification: Florida DOH E83510

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Sample Summary

IMS Environmental

Job No: F14574

Langley Air Force Base-USACE-Pavement Area
Project No: 351.3319

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F14574-1	09/12/02	11:09 WB	09/14/02	SO	Soil	C-24-A 1'-2'
F14574-2	09/12/02	11:25 WB	09/14/02	SO	Soil	C-25-A 1'-2'
F14574-3	09/12/02	14:15 WB	09/14/02	SO	Soil	C-29-A 1'-2.5'
F14574-4	09/13/02	08:30 WB	09/14/02	SO	Soil	C-32-A 1'-2.5'
F14574-5	09/13/02	09:35 WB	09/14/02	SO	Soil	C-35-A 1'-2.5'
F14574-6	09/13/02	10:00 WB	09/14/02	SO	Soil	C-37-A 1'-2.5'
F14574-7	09/13/02	10:45 WB	09/14/02	SO	Soil	C-38-A 1'-2.5'
F14574-8	09/13/02	10:45 WB	09/14/02	SO	Soil	C-38-B 2'-6'
F14574-9	09/13/02	11:00 WB	09/14/02	SO	Soil	C-39-A 1'-2.5'
F14574-10	09/13/02	11:30 WB	09/14/02	SO	Soil	C-40-A 1'-2.5'
F14574-11	09/13/02	11:45 WB	09/14/02	SO	Soil	C-41-A 1'-3'

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

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Client Sample ID: C-24-A 1'-2'

Lab Sample ID: F14574-1

Date Sampled: 09/12/02

Matrix: SO - Soil

Date Received: 09/14/02

Method: SW846 8260B

Percent Solids: 88.1

Project: Langley Air Force Base-USACE-Pavement Area

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	H018043.D	1	09/25/02	NAF	n/a	n/a	VH622
Run #2							

	Initial Weight
Run #1	5.01 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	88.4	5.7	ug/kg	
108-88-3	Toluene	22.5	5.7	ug/kg	
100-41-4	Ethylbenzene	21.2	5.7	ug/kg	
1330-20-7	Xylene (total)	38.7	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		70-130%
2037-26-5	Toluene-D8	109%		79-121%
460-00-4	4-Bromofluorobenzene	128%		77-133%
17060-07-0	1,2-Dichloroethane-D4	109%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	C-24-A 1'-2'	Date Sampled:	09/12/02
Lab Sample ID:	F14574-1	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	88.1
Method:	SW846 8015 M SW846 3550B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23618.D	20	09/18/02	SKW	09/17/02	OP5878	GOP846
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range) ^a	201	190	mg/kg	
	TPH (JP-4 Range)	ND	190	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	78%		64-121%	

(a) TPH calculated as total area, pattern appears to be oil related.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C-25-A 1'-2'	Date Sampled:	09/12/02
Lab Sample ID:	F14574-2	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	82.1
Method:	SW846 8260B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K010301.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

Run #	Initial Weight
Run #1	5.46 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.6	ug/kg	
108-88-3	Toluene	19.9	5.6	ug/kg	
100-41-4	Ethylbenzene	2.6	5.6	ug/kg	J
1330-20-7	Xylene (total)	ND	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
2037-26-5	Toluene-D8	100%		79-121%
460-00-4	4-Bromofluorobenzene	106%		77-133%
17060-07-0	1,2-Dichloroethane-D4	95%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-25-A 1'-2'	Date Sampled:	09/12/02
Lab Sample ID:	F14574-2	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	82.1
Method:	SW846 8015 M SW846 3550B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23597.D	1	09/17/02	SKW	09/17/02	OP5878	GOP845
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
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	TPH (JP-8 Range)	ND	10	mg/kg	
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	TPH (JP-4 Range)	ND	10	mg/kg	
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
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84-15-1	o-Terphenyl	94%		64-121%
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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C-29-A 1'-2.5'	Date Sampled:	09/12/02
Lab Sample ID:	F14574-3	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8260B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K010302.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

Run #	Initial Weight
Run #1	5.51 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.4	ug/kg	
108-88-3	Toluene	14.3	5.4	ug/kg	
100-41-4	Ethylbenzene	ND	5.4	ug/kg	
1330-20-7	Xylene (total)	ND	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	100%		79-121%
460-00-4	4-Bromofluorobenzene	104%		77-133%
17060-07-0	1,2-Dichloroethane-D4	93%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-29-A 1'-2.5'	Date Sampled:	09/12/02
Lab Sample ID:	F14574-3	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	83.3
Method:	SW846 8015 M SW846 3550B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23598.D	1	09/17/02	SKW	09/17/02	OP5878	GOP845
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range)	ND	9.8	mg/kg	
	TPH (JP-4 Range)	ND	9.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	98%		64-121%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C-32-A 1'-2.5'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-4	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	SW846 8260B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K010300.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

Run #	Initial Weight
Run #1	5.19 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.7	ug/kg	
108-88-3	Toluene	15.1	5.7	ug/kg	
100-41-4	Ethylbenzene	ND	5.7	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
2037-26-5	Toluene-D8	101%		79-121%
460-00-4	4-Bromofluorobenzene	102%		77-133%
17060-07-0	1,2-Dichloroethane-D4	95%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C-32-A 1'-2.5'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-4	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	SW846 8015 M SW846 3550B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23599.D	1	09/17/02	SKW	09/17/02	OP5878	GOP845
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range)	ND	9.8	mg/kg	
	TPH (JP-4 Range)	ND _c	9.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%		64-121%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: C-35-A 1'-2.5'

Lab Sample ID: F14574-5

Date Sampled: 09/13/02

Matrix: SO - Soil

Date Received: 09/14/02

Method: SW846 8260B

Percent Solids: 90.9

Project: Langley Air Force Base-USACE-Pavement Area

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K010303.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

	Initial Weight
Run #1	5.19 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.3	ug/kg	
108-88-3	Toluene	16.8	5.3	ug/kg	
100-41-4	Ethylbenzene	ND	5.3	ug/kg	
1330-20-7	Xylene (total)	ND	16	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
2037-26-5	Toluene-D8	100%		79-121%
460-00-4	4-Bromofluorobenzene	104%		77-133%
17060-07-0	1,2-Dichloroethane-D4	92%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID:	C-35-A 1'-2.5'	
Lab Sample ID:	F14574-5	Date Sampled: 09/13/02
Matrix:	SO - Soil	Date Received: 09/14/02
Method:	SW846 8015 M SW846 3550B	Percent Solids: 90.9
Project:	Langley Air Force Base-USACE-Pavement Area	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23600.D	1	09/17/02	SKW	09/17/02	OP5878	GOP845
Run #2							

	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range)	ND	8.9	mg/kg	
	TPH (JP-4 Range)	ND	8.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	100%		64-121%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C-37-A 1'-2.5'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-6	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	85.3
Method:	SW846 8260B		
Project:	Langley Air Force Base-USACE-Pavement Area		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K010304.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

	Initial Weight
Run #1	5.28 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.6	ug/kg	
108-88-3	Toluene	53.5	5.6	ug/kg	
100-41-4	Ethylbenzene	8.9	5.6	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
2037-26-5	Toluene-D8	106%		79-121%
460-00-4	4-Bromofluorobenzene	101%		77-133%
17060-07-0	1,2-Dichloroethane-D4	94%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-37-A 1'-2.5'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-6	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	85.3
Method:	SW846 8015 M SW846 3550B		
Project:	Langley Air Force Base-USACE-Pavement Area		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	OP23619.D	4	09/18/02	SKW	09/17/02	OP5878	GOP846
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range)	140	39	mg/kg	
	TPH (JP-4 Range)	ND	39	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	95%		64-121%

(a) TPH calculated as total area, pattern consists of more than just JP-8.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-38-A 1'-2.5'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-7	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	84.9
Method:	SW846 8260B		
Project:	Langley Air Force Base-USACE-Pavement Area		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K010305.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

	Initial Weight
Run #1	5.33 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.5	ug/kg	^c
108-88-3	Toluene	3.1	5.5	ug/kg	J
100-41-4	Ethylbenzene	ND	5.5	ug/kg	
1330-20-7	Xylene (total)	ND	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%		70-130%
2037-26-5	Toluene-D8	100%		79-121%
460-00-4	4-Bromofluorobenzene	100%		77-133%
17060-07-0	1,2-Dichloroethane-D4	95%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C-38-A 1'-2.5'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-7	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	84.9
Method:	SW846 8015 M SW846 3550B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23602.D	1	09/17/02	SKW	09/17/02	OP5878	GOP845
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range)	ND	9.6	mg/kg	
	TPH (JP-4 Range)	ND	9.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	87%		64-121%	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-38-B 2'-6'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-8	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	73.0
Method:	SW846 8260B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K010308.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

Run #	Initial Weight
Run #1	4.78 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	7.2	ug/kg	
108-88-3	Toluene	26.3	7.2	ug/kg	
100-41-4	Ethylbenzene	ND	7.2	ug/kg	
1330-20-7	Xylene (total)	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	101%		79-121%
460-00-4	4-Bromofluorobenzene	103%		77-133%
17060-07-0	1,2-Dichloroethane-D4	92%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-38-B 2'-6'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-8	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	73.0
Method:	SW846 8015 M SW846 3550B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23603.D	1	09/17/02	SKW	09/17/02	OP5878	GOP845
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range)	ND	11	mg/kg	
	TPH (JP-4 Range)	ND	11	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		64-121%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: C-39-A 1'-2.5'

Lab Sample ID: F14574-9

Date Sampled: 09/13/02

Matrix: SO - Soil

Date Received: 09/14/02

Method: SW846 8260B

Percent Solids: 89.2

Project: Langley Air Force Base-USACE-Pavement Area

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K010309.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

Run #	Initial Weight
Run #1	5.51 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.1	ug/kg	
108-88-3	Toluene	21.4	5.1	ug/kg	
100-41-4	Ethylbenzene	6.4	5.1	ug/kg	
1330-20-7	Xylene (total)	ND	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	102%		79-121%
460-00-4	4-Bromofluorobenzene	106%		77-133%
17060-07-0	1,2-Dichloroethane-D4	95%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	C-39-A 1'-2.5'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-9	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	89.2
Method:	SW846 8015 M SW846 3550B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23606.D	1	09/17/02	SKW	09/17/02	OP5878	GOP845
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range)	10.1	9.1	mg/kg	
	TPH (JP-4 Range)	ND	9.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		64-121%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-40-A 1'-2.5'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-10	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	91.2
Method:	SW846 8260B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K010310.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

Run #	Initial Weight
Run #1	5.77 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	4.8	ug/kg	
108-88-3	Toluene	2.6	4.8	ug/kg	J
100-41-4	Ethylbenzene	2.7	4.8	ug/kg	J
1330-20-7	Xylene (total)	ND	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		70-130%
2037-26-5	Toluene-D8	102%		79-121%
460-00-4	4-Bromofluorobenzene	102%		77-133%
17060-07-0	1,2-Dichloroethane-D4	94%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-40-A 1'-2.5'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-10	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	91.2
Method:	SW846 8015 M SW846 3550B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23607.D	1	09/17/02	SKW	09/17/02	OP5878	GOP845
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range)	ND	9.0	mg/kg	
	TPH (JP-4 Range)	ND	9.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		64-121%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-41-A 1'-3'	Date Sampled:	09/13/02
Lab Sample ID:	F14574-11	Date Received:	09/14/02
Matrix:	SO - Soil	Percent Solids:	84.7
Method:	SW846 8260B		
Project:	Langley Air Force Base-USACE-Pavement Area		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	K010311.D	1	09/26/02	NAF	n/a	n/a	VK406
Run #2							

Run #	Initial Weight
Run #1	5.77 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.1	ug/kg	
108-88-3	Toluene	45.3	5.1	ug/kg	
100-41-4	Ethylbenzene	ND	5.1	ug/kg	
1330-20-7	Xylene (total)	ND	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		70-130%
2037-26-5	Toluene-D8	101%		79-121%
460-00-4	4-Bromofluorobenzene	105%		77-133%
17060-07-0	1,2-Dichloroethane-D4	93%		72-133%

(a) Sample introduction performed using method 5030A.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 1

Client Sample ID:	C-41-A 1'-3'	
Lab Sample ID:	F14574-11	Date Sampled: 09/13/02
Matrix:	SO - Soil	Date Received: 09/14/02
Method:	SW846 8015 M SW846 3550B	Percent Solids: 84.7
Project:	Langley Air Force Base-USACE-Pavement Area	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP23608.D	1	09/17/02	SKW	09/17/02	OP5878	GOP845
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (JP-8 Range) ^a	12.2	9.7	mg/kg	
	TPH (JP-4 Range)	ND	9.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%		64-121%

(a) TPH calculated as total area, pattern consists of more than just JP-8.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



ACCUTEST®

CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:

F14499

ACCUTEST QUOTE #:

CLIENT INFORMATION		FACILITY INFORMATION		ANALYTICAL INFORMATION		MATRIX CODES	
NAME: <u>IMS</u>		PROJECT NAME: <u>LANGLEY A.F.B. - VSACE</u>				DW - DRINKING WATER	
ADDRESS: <u>929 PROFESSIONAL PLACE</u>		LOCATION: <u>PAYMENT AREA</u>				GW - GROUND WATER	
CITY: <u>CHESAPEAKE VA</u>		PROJECT NO.: <u>351,3319</u>				WW - WASTE WATER	
STATE: <u>VA</u>		FAX # <u>(757) 436-5266</u>				SO - SOIL	
ZIP: <u>23320</u>						SL - SLUDGE	
SEND REPORT TO: <u>(757) 436-3000</u>						OI - OIL	
PHONE # <u>(757) 436-3000</u>						LIQ - OTHER LIQUID	
						SOL - OTHER SOLID	
FIELD ID / POINT OF COLLECTION		COLLECTION		PRESERVATION		LAB USE ONLY	
ACCUTEST SAMPLE #	DATE	TIME	SAMPLED BY:	# OF BOTTLES	MATRIX	DATE	TIME
9	9-9-02	1257	WJB	2	SD	X	X
10	9-9-02	1323	WJB	2	SD	X	X
11	9-9-02	1515	WJB	2	SD	X	X
12	9-9-02	1600	WJB	2	SD	X	X
COMMENTS/REMARKS							
407-425-6700 HEATHER							
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		RECEIVED BY:			
<input type="checkbox"/> STANDARD		<input type="checkbox"/> STANDARD		DATE TIME:			
<input type="checkbox"/> 48 HOUR RUSH		<input type="checkbox"/> COMMERCIAL "B"		2. <u>Mura Mohammed</u> 9-11-02			
<input type="checkbox"/> 24 HOUR EMERGENCY		<input type="checkbox"/> DISK DELIVERABLE		RECEIVED BY:			
<input checked="" type="checkbox"/> OTHER <u>LAB TEST</u>		<input type="checkbox"/> STATE FORMS		DATE TIME:			
EMERGENCY OR RUSH IS FAX DATA (800) 669 5227		<input type="checkbox"/> OTHER (SPECIFY)		4. <u>0900</u>			
UNLESS PREVIOUSLY APPROVED				PRESERVE WHERE APPLICABLE <input type="checkbox"/> ON ICE <input type="checkbox"/> TEMPERATURE <u>320</u> °C			
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY							
RELINQUISHED BY: <u>1. L. Bell</u>		RELINQUISHED BY:		DATE TIME:			
DATE TIME: <u>9-10-02</u>		2.		DATE TIME:			
RELINQUISHED BY:		RELINQUISHED BY:		DATE TIME:			
3.		4.		DATE TIME:			
RELINQUISHED BY:		RELINQUISHED BY:		DATE TIME:			
5.		5.		DATE TIME:			